

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A paper feeding feed mechanism with automatic compensating feeding force for supplying paper to a pickup roller ~~to pick up~~, comprising:

a swing gear assembly which includes a plurality of gears and at least one linkage bar and has one end fixed and other end swingable to transmit rotational driving power from a driving power source;

a lifting plate for holding the paper having one end fixed and other end movable; and

a cam located below the lifting plate is selectively engaged with the swingable end of the swing gear assembly to rotate; and

wherein said swing gear assembly rotates the cam to lift or lower the movable end of the lifting plate; and

wherein the cam which has non-equal radius profile is turned to lift or lower the movable end of the lifting plate to change the relative distance and an automatic compensating contact force between the paper held on the lifting plate and the pickup roller.

~~means for driving the lifting plate, wherein the cam is turned to lift or lower the movable end of the lifting plate to change the relative distance and a contact force between the paper held on the lifting plate and the pickup roller.~~

2. (Currently Amended) The paper feeding feed mechanism with automatic compensating feeding force of claim 1, wherein the cam has gear teeth formed on ~~the-a~~ peripheral surface thereof.

3. (Currently Amended) The paper feeding feed mechanism with automatic compensating feeding force of claim 1, wherein the cam is coaxial with a gear and the movable swingable end of the swing gear assembly is selectively engaged with the gear.

4. (Currently Amended) The paper feeding feed mechanism with automatic compensating feeding force of claim 1, wherein the driving means-swing gear assembly is to locate the cam below the lifting plate, and to rotate the cam to lift or lower the movable end of the lifting plate.

5. (Withdrawn) The paper feeding mechanism of claim 4 further comprising an elastic element located between the lifting plate and the cam.

6. (Withdrawn) The paper feeding mechanism of claim 5, wherein the elastic element is a spring.

7. (Withdrawn) The paper feeding mechanism of claim 1, wherein the driving means is to have the movable end of the lifting plate connecting to a swingable end of an arm, the arm having other end fixed, the cam being located below the arm and rotatable to lift or lower the movable end of the lifting plate through the arm.

8. (Withdrawn) The paper feeding mechanism of claim 7, wherein the arm is connected to the lifting plate through an elastic element.

9. (Withdrawn) The paper feeding mechanism of claim 8, wherein the elastic element is a spring or an elastic string.

10. (Withdrawn) The paper feeding mechanism of claim 1, wherein the lifting plate has a straddle section on one side, the cam being located below the straddle section, the method for driving is to turn the cam to push the straddle section to lift or lower the movable end of the lifting plate.

11. (Currently Amended) A paper feeding feed mechanism with automatic compensating feeding force for supplying paper to a pickup roller ~~to pick up~~, comprising:

a swing gear assembly which includes a plurality of gears and at least one linkage bar and has one end fixed and other end swingable to transmit rotational driving power from a driving power source;

a lifting plate for holding the paper having one end fixed and other end movable; and
a cam which has non-equal radius profile located below the lifting plate is selectively engaged with the swingable end of the swing gear assembly and rotatable to lift or lower the movable end of the lifting plate to change the relative distance and a-an automatic compensating contact force between the paper held on the lifting plate and the pickup roller.

12. (Currently Amended) The paper feeding feed mechanism with automatic compensating feeding force of claim 11, wherein the cam has gear teeth formed on ~~the-a~~ peripheral surface thereof.

13. (Currently Amended) The paper feeding feed mechanism with automatic compensating feeding force of claim 11, wherein the cam is coaxial with a gear and the movable swingable end of the swing gear assembly is selectively engaged with the gear.

14. (Currently Amended) The paper feeding feed mechanism with automatic compensating feeding force of claim 11, wherein the cam is located below the lifting plate such that the movable end of the lifting plate is lifted or lowered when the cam rotates.

15. (Withdrawn) The paper feeding mechanism of claim 14 further comprising an elastic element located between the lifting plate and the cam.

16. (Withdrawn) The paper feeding mechanism of claim 15, wherein the elastic element is a spring.

17. (Withdrawn) The paper feeding mechanism of claim 11, wherein the movable end of the lifting plate is connected to a swingable end of an arm, the arm having other end fixed, the cam being located below the arm.

18. (Withdrawn) The paper feeding mechanism of claim 17, wherein the arm is connected to the lifting plate through an elastic element.

19. (Withdrawn) The paper feeding mechanism of claim 18, wherein the elastic element is a spring or an elastic string.

20. (Withdrawn) The paper feeding mechanism of claim 11, wherein the lifting plate has a straddle section on one side, the cam being located below the straddle section and rotatable to push the straddle section to lift or lower the movable end of the lifting plate.